ABSTRACT OF THE DISCLOSURE

An apparatus and method for performing Traffic Flow Template (TFT) filtering according to Internet Protocol (IP) versions in a mobile communication system. The mobile communication system supports an address of a first IP version including first bits and an address of a second IP version including second bits containing the first bits. IP version-based information is extracted from the source IP address. TFT information containing the extracted information is generated and the generated TFT information is transmitted to a Gateway GPRS (General Packet Radio Service) Support Node (GGSN).